

## An Introduction to Global Women's Health

Nawal M. Nour, MD, MPH

Department of Maternal-Fetal Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA

*Sex-based health disparities are evident throughout the world; however, nowhere are these disparities greater than in resource-poor countries. Women in developing nations lack basic health care and face life-debilitating and life-threatening health issues. Some health issues never existed in the West, whereas science eradicated others decades ago. Maternal mortality, female genital cutting, child marriage, human immunodeficiency virus (HIV)/AIDS, and cervical cancer are a few of the issues that plague developing nations. This article introduces some of these challenging health problems. In subsequent issues, they will be explored in more depth. Reviews in Obstetrics & Gynecology hopes that highlighting global women's health issues will increase awareness and establish a renewed commitment to improving women's lives.*

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Women's health issues slowly attract international attention. This momentum rapidly increased once the United Nations' Millennium Development Goals (MDG) specifically addressed eliminating sex-based disparities in health care and reducing maternal mortality (Table 1).<sup>1</sup> Although organizations and governments implement policies and programs to improve these goals, sex-based health disparities persist in developing nations. With little access to education and employment, women have high rates of illiteracy and child marriage and high risk of morbidity and mortality. This situation affects not

**Table 1**  
**United Nations Millennium Development Goals, Target Date 2015**

**Goal 1. Eradicate Extreme Poverty and Hunger**

- Reduce by half the proportion of people living on less than \$1/day
- Reduce by half the proportion of people who suffer from hunger

**Goal 2. Achieve Universal Primary Education**

- Ensure that all boys and girls complete a full course of primary schooling

**Goal 3. Promote Gender Equality and Empower Women**

- Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015

**Goal 4. Reduce Child Mortality**

- Reduce by two thirds the mortality rate among children under 5

**Goal 5. Improve Maternal Health**

- Reduce by three quarters the maternal mortality ratio

**Goal 6. Combat HIV/AIDS, Malaria, and Other Diseases**

- Halt and begin to reverse the spread of HIV/AIDS
- Halt and begin to reverse the incidence of malaria and other major diseases

**Goal 7. Ensure Environmental Sustainability**

- Integrate the principles of sustainable development into country policies and programs; reverse loss of environmental resources
- Reduce by half the proportion of people without sustainable access to safe drinking water
- Achieve significant improvement in lives of at least 100 million slum dwellers by 2020

**Goal 8. Develop a Global Partnership for Development**

- Develop further an open trading and financial system that is rule based, predictable, and nondiscriminatory, includes a commitment to good governance, development and poverty reduction—nationally and internationally
- Address the least developed countries' special needs: this includes tariff- and quota-free access for their exports; enhanced debt relief for heavily indebted poor countries; cancellation of official bilateral debt; and more generous official development assistance for countries committed to poverty reduction
- Address the special needs of landlocked and small island developing states
- Deal comprehensively with developing countries' debt problems through national and international measures to make debt sustainable in the long term
- In cooperation with the developing countries, develop decent and productive work for youth
- In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
- In cooperation with the private sector, make available the benefits of new technologies—especially information and communications technologies

Data from the United Nations Millennium Development Goals.<sup>1</sup>

just the women themselves, but also their children, their families, and their communities.

This article introduces a series of reviews on women's health issues in developing nations. In future issues,

topics mentioned in this introduction will be discussed in more detail. The goal is to reflect on some of the most devastating health problems women in resource-poor areas face, and address what programs have been and should

be implemented in order to improve their condition.

### Maternal Mortality

Approximately 529,000 women die from pregnancy-related causes, and almost all (99%) of these maternal deaths occur in developing nations. Unsafe abortions alone cause 68,000 deaths annually. The highest maternal mortality rates are in Africa, with a lifetime risk of 1 in 16, whereas the lowest rates are in Western nations (1:2800).<sup>2</sup> Of the women who escape death, more than 10 to 20 million per year will suffer serious childbirth complications, including infertility and vesicovaginal and/or rectovaginal fistulas.<sup>3</sup>

Causes of maternal mortality in developing nations are lack of family planning and inadequate access to both skilled assistance in labor and emergency obstetric care. Women suffer postpartum hemorrhage, eclampsia, obstructed labor, and sepsis.<sup>2</sup> Basic emergency obstetric care, such as antibiotics, oxytocics, anticonvulsants, manual removal of placenta, and instrumented vaginal delivery, is vital to improve a woman's chance of survival, yet this care is rarely available.<sup>4</sup>

Neonatal survival is directly linked to maternal outcome. By 2015, the MDG seek the reduction of the maternal mortality ratio by three quarters.<sup>1</sup> Currently, this is not an achievable goal. Promoting safe motherhood requires a multifaceted approach. Effective programs, including family planning, prenatal care, safe labor and delivery, and postpartum care, are essential.

### Female Genital Cutting

Female genital cutting (FGC), an accepted practice in parts of Africa and Asia, provokes passionate controversy in medicine, law, and bioethics. The practice transcends religion, geography, and socioeconomic status. According

to the World Health Organization (WHO), more than 130 million women worldwide have undergone FGC. WHO defines FGC as “all procedures involving partial or total removal of the external female genitalia or other injury to the female genital organs whether for cultural or other nontherapeutic reasons.”<sup>5</sup>

Female genital cutting practices continue for a variety of reasons. Some cultures consider FGC a rite of

decade.<sup>9</sup> Child marriages occur most frequently in South Asia, where a 2005 United Nations Children's Fund study found that 48% of women aged 15 to 24 were married before the age of 18. The study also found that 42% of women in Africa and 29% of women in Latin America and the Caribbean in this age range were married before the age of 18.<sup>10</sup>

Although the above definition of child marriage includes boys, the ma-

Although child marriage is driven by poverty, its impact on a girl's life and health is multifaceted. She receives less formal education and is at increased risk of STDs (HIV and human papilloma virus [HPV]), malaria, early pregnancy, death during childbirth, and obstetric fistulas. Her offspring are at an increased risk of premature birth and neonatal, infant, and child death. Governmental and nongovernmental policies and programs must educate the community, raise awareness, engage local and religious leaders, involve parents, and empower girls through education and employment in order to stop child marriage.<sup>14</sup>

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passage into womanhood and believe it preserves chastity and ensures marriageability, improves fertility, and enhances sexual pleasure for men. Girls usually undergo the procedure between the ages of 6 and 12. Of the 4 types of FGC, type III causes the most immediate and long-term complications. Women with type III FGC have part or all of their external genitalia removed and subsequent infibulation, which involves suturing the remnant tissue that overlays the urethra and most of the introitus. Immediate complications include hemorrhage, infection, sepsis, and death.<sup>6</sup> Long-term complications include dysmenorrhea, dyspareunia, vaginitis, and cystitis.<sup>7</sup> Infibulated women have difficulty during delivery if their infibulated scar remains closed. Efforts are being made locally and internationally to eradicate this practice.<sup>8</sup>

### Child Marriage

Child marriage, defined as marriage before the age of 18, is an ancient custom worldwide. Almost 52 million girls under the age of 18 are married today. Approximately 25,000 girls are married each day, and watchdogs predict that over 100 million girls under the age of 18 will be married in a

majority of those married under the age of 18 are girls. In Mali, the ratio of married girls under the age of 18 to married boys under the age of 18 is 72:1; in Kenya, it is 21:1; and in the United States, it is 8:1.<sup>11,12</sup> Since 1948, the United Nations and other international agencies have made efforts to stop child marriage. In many countries, the legal age for marriage is 18. Yet the percentage of girls married before the age of 18 in Niger is 77%, in Chad is 71%, in Mali is 63%, in Cameroon is 61%, and in Mozambique is 57%.<sup>9</sup> In parts of Ethiopia, 50% of girls are married before the age of 15, and in Mali, 39% are married before 15.<sup>13</sup> Some marriages even occur at birth; at the age of 7 the girl is sent to her husband's home. These statistics indicate how loosely governments enforce marriageable age laws.

Child marriage continues because it is believed to ensure the girl's financial future and dowry, reinforce social ties, and stabilize social status. Child marriage is also seen as a protective mechanism against premarital sexual activity, unintended pregnancies, and sexually transmitted diseases (STDs). These protections are considered more important in the era of human immunodeficiency virus (HIV)/AIDS.

### Cervical Cancer

Cervical cancer is the second most common cancer in women worldwide and the most common cancer in developing nations. It targets women between the ages of 15 and 45 and ends 288,000 lives per year. According to WHO, there are 510,000 new cases every year, with 80% occurring in developing nations. Half of these cases end in death.<sup>15</sup> With regular Papanicolaou and HPV testing, cervical cancer is preventable. However, this disease demonstrates the inequities of today's world. Due to poverty, Papanicolaou and HPV testing is limited or nonexistent in many developing countries and recommended treatments for cervical cancer are not readily available. Efforts are being made to find low-technology methods of “screen and treat” that rely on visual inspection of the cervix followed by cryotherapy treatment.<sup>16</sup> Pilot projects are currently underway to increase the availability of the HPV vaccine in developing nations and bring new hope and promise to this population of women.

### HIV/AIDS

AIDS has emerged as a global epidemic; more than 33.2 million men

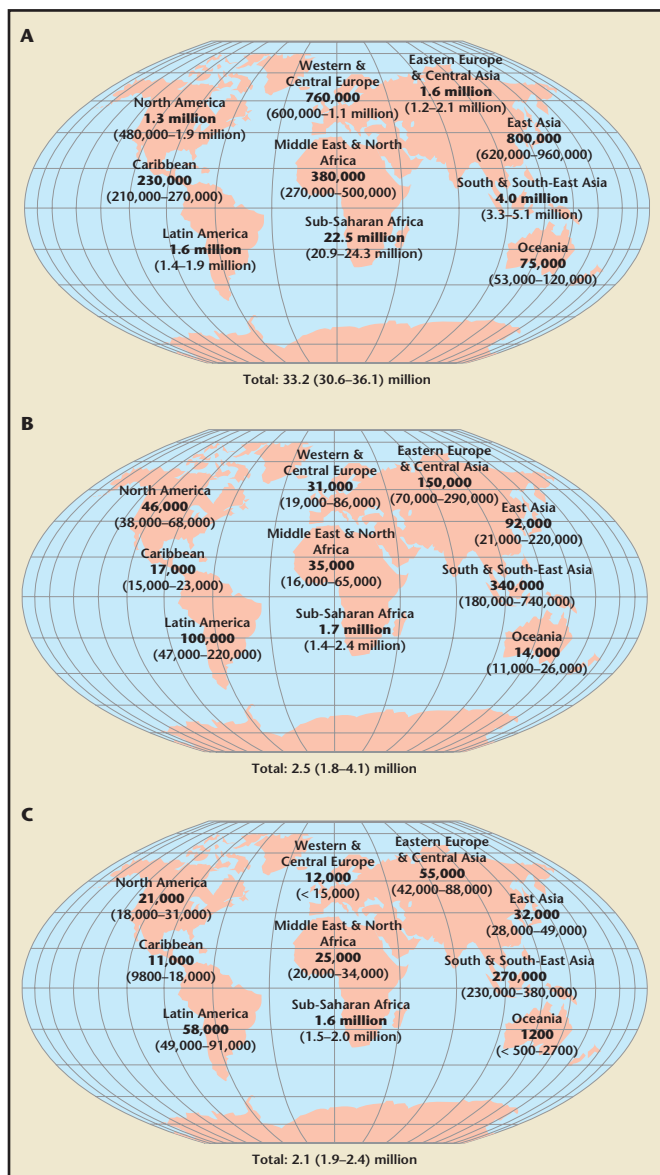


Figure 1. (A) Number of adults and children estimated to be living with human immunodeficiency virus (HIV). (B) Estimated number of adults and children newly infected with HIV. (C) Estimated number of adult and child deaths from AIDS. All data from the year 2007. Reprinted from the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO), by kind permission of UNAIDS ([www.unaids.org](http://www.unaids.org)).<sup>17</sup>

and women are HIV positive. There are 6800 new cases and 5700 deaths every day (Figure 1). Sub-Saharan Africa is the hardest hit area: half of HIV-positive people are women, and 76% of these women live in sub-Saharan Africa, where little treatment is available. In this region, the ratio of

HIV-positive women to men is 3 to 2.<sup>17</sup> Mother-to-child transmission is high, with transmission rates approximately 25% to 30%. More than 2 million children under the age of 15 are living with HIV, most having acquired it via their mothers. Most pregnant women are unaware of their HIV

status because of lack of access to testing, lack of knowledge of the disease, or fear of knowing the outcome due to the stigma it places on them. Of the 10% to 12% who are tested, few found HIV-positive receive treatment. Antiretroviral therapy is available to about 11% of HIV-positive women in developing countries.<sup>18</sup> Some developing nations have shown improvement recently due to programs that have resulted in a significant decrease in risky behavior, extensive public education, and empowerment of women through education and employment.

## Conclusions

Such disheartening statistics may leave the reader feeling overwhelmed, discouraged, and helpless. However, most of these problems can be solved in our generation. Each one requires a commitment and an investment from the international community, policymakers, nongovernmental organizations, donors, United Nations agencies, health practitioners, and religious leaders. One of the greatest challenges decision makers encounter when tackling the MDG is where to allocate scarce resources. Investing in girls and women benefits not only the individual but also society as a whole. Programs that postpone marriage and pregnancy can improve women's health. Providing formal or vocational education, adequate family planning, and antenatal services can break the cycle of poverty and empower women. Girls need to learn about reproductive and sexual health, STD prevention, contraception, AIDS, and how to seek health care. Governments must incorporate preventive care and treatment programs for reproductive health issues into their health services. In order for us to reach the United Nations Millennium Development Goals, the health and human rights of girls and women must be a priority for each nation. ■



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## Main Points

- Causes of maternal mortality in developing nations are lack of family planning and inadequate access to both skilled assistance in labor and emergency obstetric care.
- Of the 4 types of female genital cutting, type III causes the most immediate and long-term complications. Immediate complications include hemorrhage, infection, sepsis, and death. Long-term complications include dysmenorrhea, dyspareunia, vaginitis, and cystitis.
- Although child marriage is driven by poverty, its impact on a girl's life and health is multifaceted. She receives less formal education and is at increased risk of sexually transmitted diseases (human immunodeficiency virus [HIV] and human papillomavirus [HPV]), malaria, early pregnancy, death during childbirth, and obstetric fistulas. Her offspring are at an increased risk of premature birth and neonatal, infant, and child death.
- Due to poverty, Papanicolaou and HPV testing is limited or nonexistent in many developing countries and recommended treatments for cervical cancer are not readily available.
- AIDS has emerged as a global epidemic; more than 33.2 million men and women are HIV positive. Half of HIV-positive people are women, and 76% of these women live in sub-Saharan Africa, where little treatment is available.